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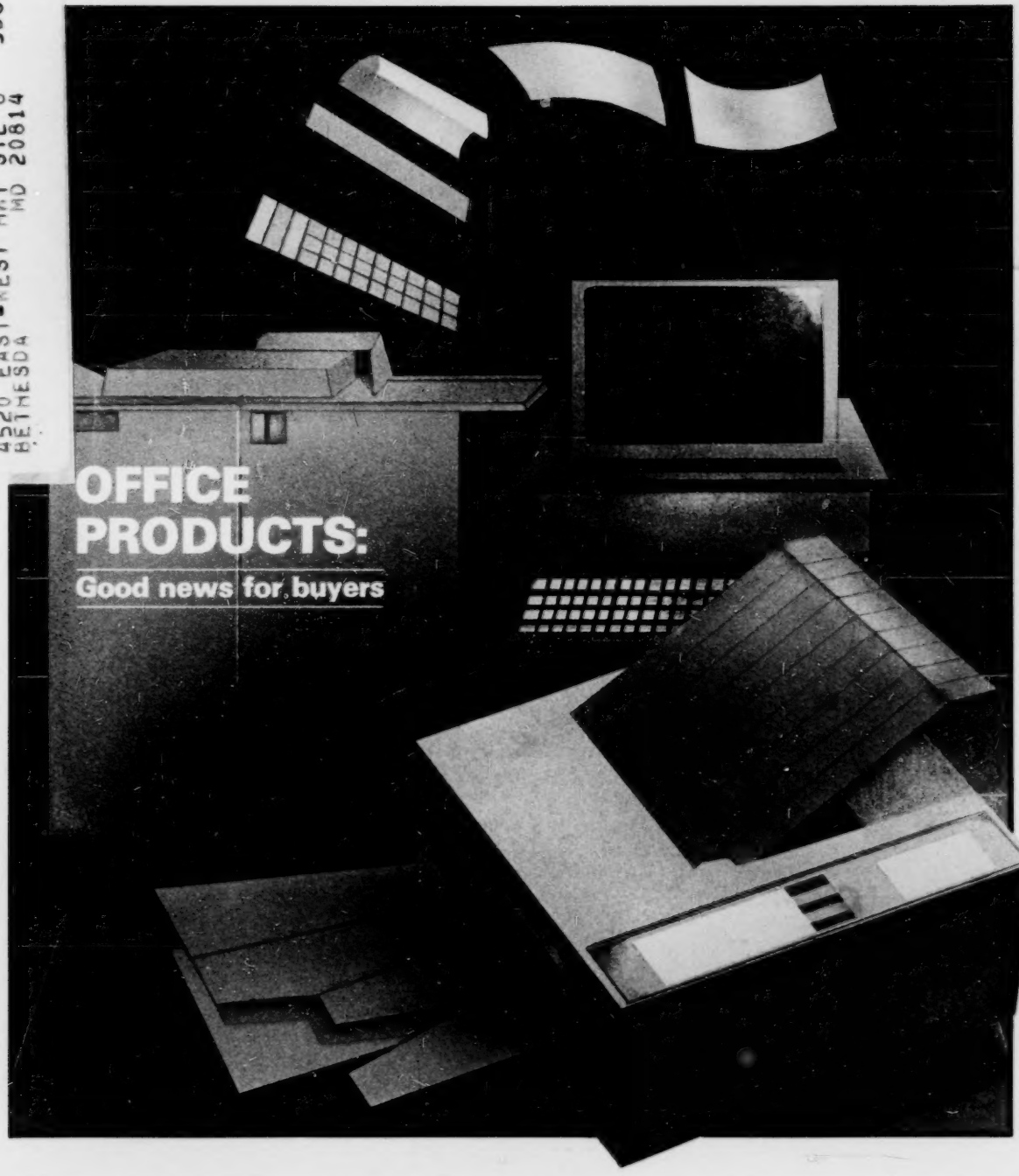

OFFICE PRODUCTS:
Good news for buyers

Using spreadsheets as a purchasing tool

Buying inbound transportation, Part II

Four tigers are hungry for global buyers

PurchasingWorld®

Helping you manage the business of buying

October 1986 Vol. 30 No. 10

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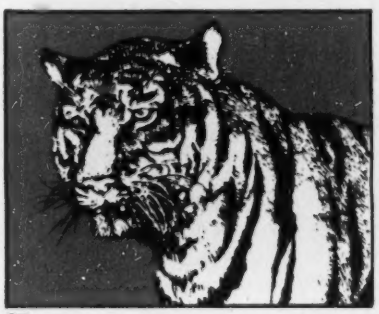

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PW PREDICTS

Robert S. Reichard, executive editor

Inflation foiled by mixed forces

This past spring, most forecasters expected prices to get up and move around a bit. Instead they just laid down and stayed there.

The expected 1-2% rise in Uncle Sam's industrial producer price index for the just-ended third quarter not only failed to materialize, it actually declined.

Certainly, energy had a lot to do with it. But even if you remove the sharp drop in oil from the equation, prices have remained relatively stable. This is confirmed by recent N.A.P.M. surveys which indicate that the few buyers who reported higher prices on items are being offset by others who have been paying less for their procurement mixes.

Several forces, other than energy, are behind this surprisingly good showing. First is the disappointing real demand picture. Industrial outlays actually showed a fractional decline from the early part of this year. In turn, this has lowered factory operating rates to 78%—off more than 2.5% from January and low enough to keep suppliers on the defensive.

Another factor is the small increase in labor costs. Latest readings show employment costs up only 4% over the past 12 months, with a good portion of this being offset by productivity gains (3.1% at annual rate for the nonfarm business sector during the first six months of this year). And heavily unionized sectors of the economy seem to be faring better. Collective bargaining agreements during the first half of the year called for only 1.9% pay hikes over the life of the contracts.

The failure of import prices to rise as much as projected is still another unexpected factor in the current inflation lull. Despite the steep drop in the dollar, many overseas suppliers have been reluctant to post any big increases. Some have chosen to pare profit margins instead. Also helping here is the fact that the dollar has not actually declined for some of our trading partners, such as Canada and some of the developing Southeast Asian nations.

Lastly is the continuing slump in base metals and other grassroots raw material prices. *PW* 's sensitive price barometer, which is made up solely of commodity-level products, is now off more than 5% from a year ago.

The big question is whether this set of coincidental forces that is currently depressing inflation will continue. At this point, the answer is probably "no."

PW projections suggest 1) about a 2-3% annual rate of real growth over the next few quarters—enough to nudge operating rates back toward 80%, 2) modest acceleration in unit labor costs—as efficiency gains become harder to achieve, 3) a slow step-up in import quotes, especially in the fabricated areas such as component parts and machinery, and 4) an upward push on raw material prices resulting from somewhat better balance in world markets.

All these forces together are bound to put some upward pressure on the overall U.S. price level. But advances should be modest. *PW*'s industrial producer price forecast calls for only 2-2.5% annual rate of increase by early next year. That's hardly a call for alarm, especially when you consider that 1987 will mark the fifth consecutive year of current cyclical upturn.

Leasing trends

Equipment leasing seems headed for another record year. But gains won't be as big as the 32% and 16% advances in 1984 and 1985, according to Michael Fleming, president of the American Association of Equipment Lessors.

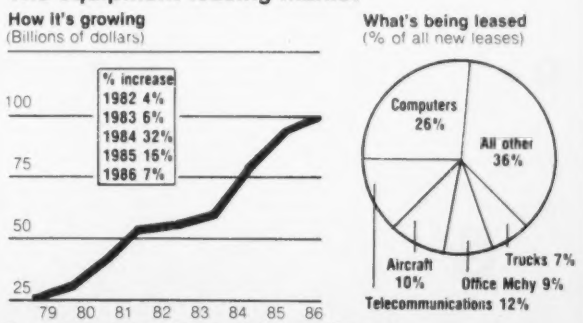
He blames the slowdown in the rate of increase on two factors: 1) a weaker economy, and 2) uncertainty over the final form of the pending tax reform bill.

Nevertheless, Fleming is basically optimistic. He expects a fourth quarter spurt (equipment decisions are often made late in the year) to keep 1986 in the plus column.

Another sign of continuing forward momentum: Many of the big lessors are diversifying into new product lines and are now better described as "asset managers"—combining leasing, managing, and servicing of operating assets for their clients. Fleming says that these asset management skills are valuable in auto leasing, commercial real estate lending, and leveraged buyouts.

The two largest categories of equipment leased last year were computers, with 26% of the new business, and telecommunications, with 12% of new business.

The equipment leasing market



Source: American Assn. of Equipment Lessors; PW Estimate

PW PREDICTS

Zinc

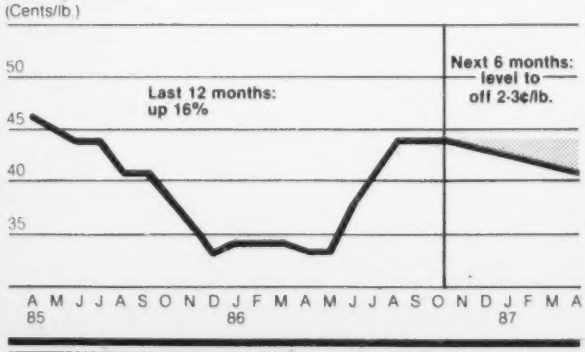
CURRENT SITUATION: The plating and alloying metal is riding high. Prices have jumped from a low of 33¢/lb earlier this year to over 40¢/lb currently. **Behind the increase: Recent production cutbacks and scattered work stoppages have tightened supplies.** A strong overseas market has added to the upward domestic pressure—foreign producers recently hiked their asking prices to $880/metric ton—up from $700/ton in January.

DEMAND: A small U.S. consumption gain (to around 915,000 tons of slab zinc) is likely for overall 1986—thanks to increased use of galvanized metal in the auto and construction industries (the two largest users). But more decline is expected in die casting alloy because of lower car production. One bullish factor for the long run is Detroit's continuing emphasis on galvanized bodies to prevent rust. Upshot: **Domestic consumption should increase by 2.5% a year to 1990.**

SUPPLY: Current snugness is emphasized by the decline in both global production and stock levels. Worldwide mine output is off about 8% this year—with smelter inventories down over 120,000 tons from last year. **But some relief is on the way** from previously struck Australian facilities. Expect some increase from labor-troubled Canadian mines, too. For the long haul, mine and smelting capacity remains adequate. **The world reserve base is good.**

PRICE OUTLOOK: Some downward correction seems likely once supply comes back into balance. But any near-term decline should be slight—with tags remaining well above the lows of the past winter and spring. **Little change is anticipated in the long term.** A study by DRI forecasts only about a 2% annual increase over the next two years. But Wharton Econometrics sees prices remaining at or near current levels through 1988.

Zinc prices
(Cents/lb.)



Steel

Prices are firming a bit—following recent scattered work stoppages. Sign of the times: the 2-3% increase in sheet prices, a 4% boost in some plate tags, and a 7% + advance in mechanical and structural tubes. On a more bearish note, consumption this year has been revised downward by three million tons (to 89 million). Add the fact that imports still account for 23% of the market, and weakness could well develop again when strikes are over. As for next year—very little price advance is seen—averages will climb by no more than 3%.

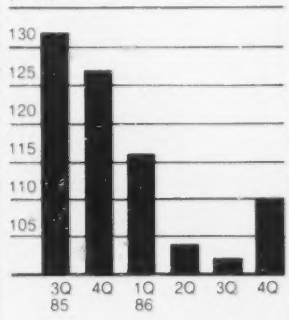
Propylene

Producers are pushing for higher prices—with quotes likely to reach about 11¢/lb for chemical-grade material this month—up about 1.25¢/lb from recent August lows. Behind the increase: rising feedstock costs and some temporary drop in production. Also demand has been fairly brisk. Polypropylene, the largest single end use, is expected to post about a 7% increase in overall shipments this year—thanks in large part to 30% + gains in the domestic film and export markets.

Caustic soda

New attempts to boost this key chloralkali could mean somewhat higher market prices. Best bet: a $10/ton advance. But that would be well under the $30/ton boost some suppliers are asking. This could bring prices up to near $100/ton in the South, and a bit higher than that in the North. Strong demand is probably behind the latest price-boosting attempt—with end use markets (paper, pulp, chemicals, and petroleum refining) running about 3-4% above a year ago. Also inventories, while still high, appear to be a bit more manageable these days.

Caustic soda
(Northern U.S. market price)
($/ton)



Aluminum

The light metal is somewhat on the shaky side—as buyers work off inventories built up in fear of a general strike that never materialized. Thus producers have knocked 4¢/lb off the going ingot price (bringing quotes to 60¢/lb)—and merchant metal goes for 5¢/lb under that. Foundry ingots and fabricated items are down, too. And Free World demand isn't all that robust this year—reaching only 12.5 million tonnes—off fractionally from 1985. Moreover, with production catching up (near 12.2

million tonnes is projected for 1986), it suggests very little additional producer inventory drawdown. Prices will remain at current depressed levels into early 1987.

Copper

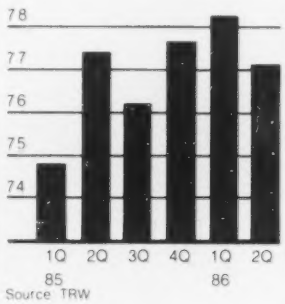
The red metal seems incapable of generating a sustained rally. Producer material is still fetching below 65¢/lb. One reason: the peaceful resolution of labor negotiations a few months back. Other factors behind the softness: 1) a 4-8¢/lb reduction in labor costs because of new pay rollbacks and 2) the addition of new and revitalized U.S. capacity in Montana and Utah. Demand hasn't been all that brisk either, as auto buying levels off and machinery (which accounts for 14% of the market) actually heads lower. Global capacity is more than ample, too—with output figured at only 83% of rated potential.

Accounts receivable

Buyers are paying a bit more slowly than they did three months ago. The figures, based on a new TRW report, show that only 77.1% of receivables are on time—off more than 1% from earlier this year. The increase is mostly in the 1-60 day overdue sector—the 5.5% who are more than 60 days in arrears remains unchanged. But averages can be deceiving. These industries report that nearly 50% of their receivables are past due: data processing equipment, office equipment, control devices, construction machinery, fabricated metals, printing supplies, and mining.

Accounts receivable

(On-time percentage)



Source: TRW

Office equipment

Add electronic copy boards (first introduced in late 1985) to the growing list of innovative office products. These free-standing boards (with a scanner that will copy what's written or tacked onto it) currently sell for around $3,000. But look for tags to come down significantly—more than a dozen vendors are already fighting for market share. The board's big pluses: They save time in advance preparation of materials for last-minute meetings, eliminate note-taking, preserve important drawings and ideas, and double as a projector screen.

Titanium dioxide

Prices are moving up. The rutile grade has advanced 2¢/lb (to 77¢/lb) and the anatase grade is up 3¢/lb (to near 80¢/lb). Rising costs are primarily respon-

Textile mill products

CURRENT SITUATION: Markets are still jittery—reflecting developments that will affect both supply and price for years to come. The recent unprecedented 35¢/lb drop in raw cotton tags is unsettling, as are recent changes in trade ground-rules such as 1) Congress' support of a Presidential veto of a trade protection bill, 2) the conclusion of several bilateral trade agreements with key exporting countries, and 3) ratification of a new Multi-fiber Agreement

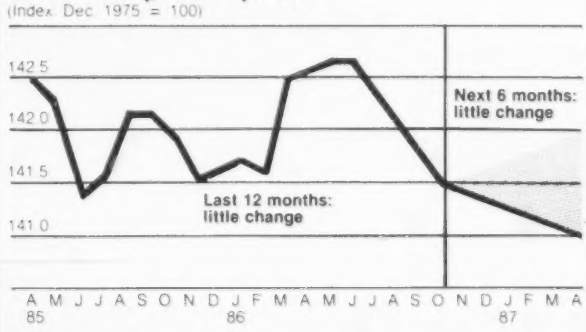
DEMAND: Look for fairly good domestic production this year—despite record imports. U.S. producers should increase output by 6-7% over 1985. **But gains will be uneven.** While print cloths are moving well, carpet gains will level off—with only a 1-2% advance vs. last year's 9%+ advance. As for 1987, much depends on the efficacy of new import curbs and the general business trend. **Perhaps a 3% domestic increase is possible.**

SUPPLY: Domestic mill operating rates have moved up—a reflection of improved output and rationalization of existing capacity. The number of shuttle looms producing broadwoven grey goods has dropped 20% under last year. **And the current near 90% mill utilization rate is up 5% from a year ago. But any resulting tightness is being filled by imports.**

PRICE OUTLOOK: The picture is mixed. On the downside are sharply lower cotton costs—with competing polyester feeling some pressure. But a weaker dollar should stem downward moves in imports. Brisk demand could help prop prices. Weavers sitting on 3-4 month backlogs should continue to hold onto the new cotton cost advantage. Best bet: **little change in textile mill product averages over the next six months—with a 1-2% increase possible in late 1987** if new import curbs are even partially effective.

Textile mill product prices

(Index: Dec. 1975 = 100)



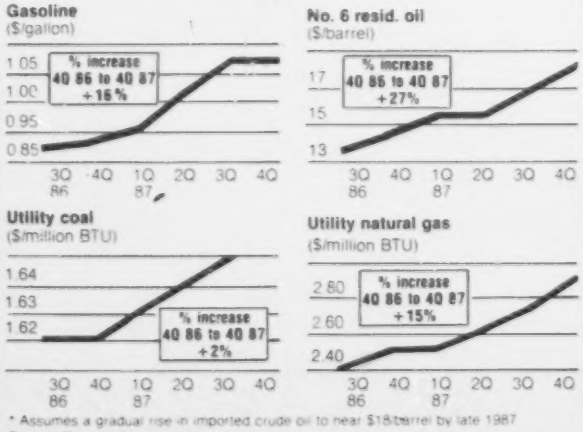
Energy price outlook

Budget for some fair-sized price hikes in the energy sector over the next 12 months.

That's the word from DOE analysts. Based on the assumption that OPEC crude oil will gradually rise to about $18/barrel by the fourth quarter of next year, here's what they see ahead in key areas:

- **Gasoline**: The seasonal demand lull should keep near-term price increases in the 1-3¢/gallon range over the rest of the year. But by next summer's driving season, the average (all grades and services) pump price should be around $1.03/gallon.
- **Heating oil**: Improved margins, combined with higher crude tags, will push wholesale prices to 56¢/gallon and retail prices up to 84¢/gallon. That compares with the 43¢/gallon wholesale and 74¢/gallon retail prices of this past June.
- **Diesel oil**: The pattern will be similar to heating oil. The recent 86¢/gallon low at the retail level will rise to around $1.00/gallon by late next year.
- **Residual oil**: Prices will rise here, too, despite the fact that demand is expected to be off as much as 7% next year because of increasing use of coal and nuclear power. Resid could go to $18.30/barrel by late 1987—well above the recent $13-14/barrel lows.
- **Natural gas**: There is a mixed pattern here. Residential rates will move up only about 2.5% over the next year. But a 15% increase is seen for the electric utility market.
- **Electricity**: Some modest acceleration is projected. While residential rates rose only 1% on average over the past 12 months, a more substantial 3% increase is forecast for the next four quarters.

Energy tabs: heading higher*



* Assumes a gradual rise in imported crude oil to near $18/barrel by late 1987
Source: Dept. of Energy

sible—as natural rutile sells for 12-30% above last year—reflecting new environmental compliance outlays. Prices of chlorine (used in production) are also up substantially. Market fundamentals are strong, too—as demand rises another 2-3% this year and the industry operates in the high 95-100% of capacity range.

Polystyrene

The big-volume plastic is turning a bit more buoyant. Market prices moved up about 2¢/lb in late summer—and new hikes are scheduled for this month which could move quotes back into the 35¢/lb+ range again—well above the 31¢/lb low of mid-spring. Strong demand is one factor behind the pickup—with the industry expected to ship close to 4.3 billion lb of the resin this year—up 5% from 1985. And next year's gain could be even bigger—maybe in the 6% range. Another sign of strength: rising operating rates which in recent months have inched above the 85% mark.

Electronic components

A modest demand recovery seems to be getting under way—one that will gather steam in 1987 and 1988. Henderson Ventures (a big market research firm) projects that semiconductor shipments will be up 10% this year—and up more than 20% in 1987 and 1988. Less volatile passive components are also ready to improve—6-7% this year and about 13-15% in both 1987 and 1988. One reason for slower growth in passives is their continued displacement by digital technology and the use of denser ICs having more of the interconnection and passive functions integrated on board.

Electronic components
(% increase over previous year)

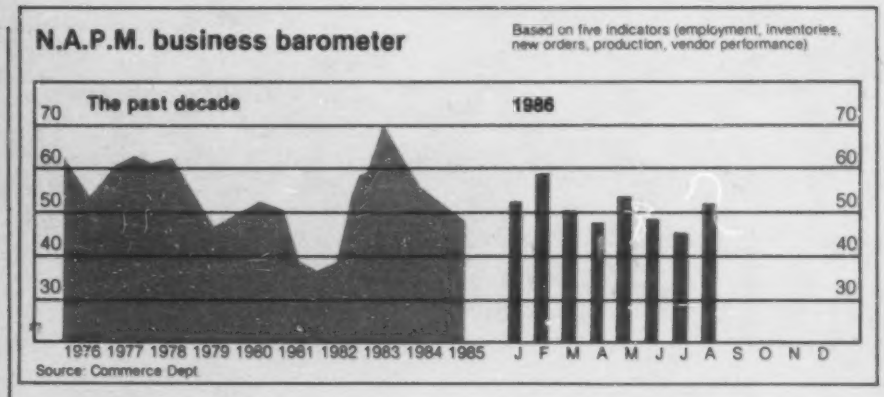
Semiconductors	Passives
85 −22.9	85 −6.4
86 +.99	86 +6.5
87 +21.8	87 +12.9
88 +27.2	88 +14.7

Source: Henderson Ventures

Lead

Firmness is now the order of the day—with several producers moving up into the 23¢/lb range—a significant increase over the less than 20¢/lb prices prevailing as recently as this past spring. Behind the buoyancy: increased seasonal buying by battery makers—the metal's principal customers. Also on the bullish side are declining stocks and a gradual return to supply-demand balance. Thus world-wide refined production will drop to 4.04 million tonnes this year (versus 4.19 million in 1985)—not much above the steady 3.95 million ton consumption estimate. Surpluses are possible next year—bringing prices down to near the 20¢/lb level by as early as next spring.

BUSINESS DATATRAK


N.A.P.M. business barometer
Based on five indicators (employment, inventories, new orders, production, vendor performance)
The past decade
1986
70
60
50
40
30
1976 1977 1978 1979 1980 1981 1982 1983 1984 1985
J F M A M J J A S O N D
Source: Commerce Dept.

KEY ECONOMIC TRENDS

Two cheers for key indicators

The nearly four-year-old business expansion still has a way to go.

Among the more reassuring signs: 1) recent improvement in key economic indicators, 2) an increase in new orders, 3) continuing low inventory levels, 4) relatively high construction activity, and 5) a well-heeled and optimistic consumer sector.

Looking at each of these separately:

▪ **Leading indicators:** Both Uncle Sam's widely monitored index and the N.A.P.M. Business Barometer have tended to move up over the last month. The latter bounced back into the positive (above 50) range, signifying that potential pluses are again outweighing negative forces.

▪ **New factory orders:** Bookings advanced 2.2% over the latest report month—the largest increase since last December. And the gain in the important durable goods sector was even more impressive (see chart).

True, totals are still under late last year, and much of the gain in the past month reflected a surge in defense orders, but, as one economist put it, "A rise is better than a decline, even if it is not as good as it looks on the surface."

▪ **Factory inventories:** Stock-sales ratios (a measure of days' supply) continue to be exceptionally tight. Most analysts think they are now as low as they can go and that some accumulation is inevitable during the fourth quarter if current demand is to be met.

▪ **Construction:** The outlook remains bright, despite some fall off in housing permits over the past few months (see chart). Optimism is being generated by 1) falling mortgage rates—now under 10% for conventional loans and 2) continued strength in building awards which show a 12% year-to-date increase in new housing. Most projections now call for 1.9 million new units for the current year—up from last year's 1.74 million units.

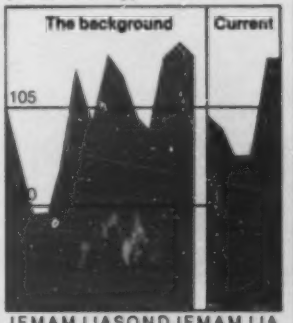
▪ **Consumer spending:** Things are looking up. New car sales, for example, ran at a 12.7 million seasonally adjusted annual rate and September was even better—given the new financial incentives the domestic car makers are offering.

Another bright sign: Detroit's plans for fourth quarter production are up. At latest report, the October-December car assembly target was 2,046,940 units—up 3.7% over last year.

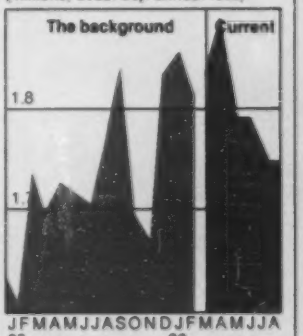
More important, consumers also have money to spend on cars and other big-ticket discretionary items. Aiding in real income growth are such factors as minimal inflation,

Leading indicators

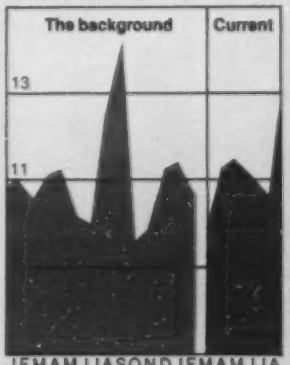
1. Durable goods orders
(Bil. $, seas. adj.)



2. Housing permits
(millions, seas. adj. annual rate)



3. Car sales
(millions, seas. adj. annual rate)



relatively low energy rates, declining unemployment rates, and the growing realization that tax reform measures will result in a substantial income tax cut for many. The new tax plan, when finalized, is expected to boost the average family paycheck by as much as 7-8%.

The typical consumer also seems to have the motivation (as well as the wherewithal) to spend more. A new University of Michigan survey shows that buying attitudes have edged up to their highest level since the study was first started some 40 years ago.

This consumer strength should be enough to offset such downward pressures as the large trade deficit, sluggish capital spending, and more restraint in government spending. And that's why most projections call for continued output gains. Consensus fourth quarter forecasts call for industrial production to grow at 2-3% annual rate over the last three months of the year—reversing the disappointing results of the past six months.

Cheap fuel drives fleet costs down

There's good news for truck and automobile buyers. The recent sharp drop in fuel tags will effectively offset rising acquisition costs, keeping overall ownership and operating outlays per unit relatively unchanged (79¢/mile for the average truck and 33¢/mile for a car).

Those estimates are part of a new Hertz study which takes a closer look at the latest developments in an industry which gobbles up almost $800 billion each year. Other key findings of the new study:

- **Trucks:** Average depreciation cost is 14¢/mile—with another 10¢/mile earmarked for fuel. Also vehicles in service leaped 8.8% over the past year—from 38.6 million to 42 million units. New sales topped the four million mark for the second consecutive year.

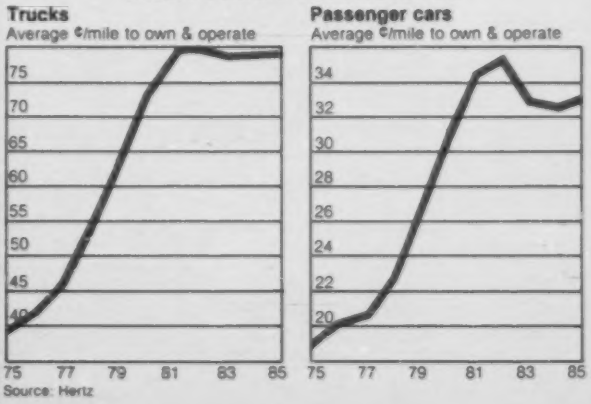
In other truck developments 1) the average annual outlay per unit now comes to over $9,500, 2) average yearly truck mileage is increasing—up 4% in the past year, and 3) more than 13% of this mileage is for vacations, commuting, business trips, etc. (reflecting the increasing number of smaller vans, pickups, and utility units on the road).

- **Passenger vehicles:** Average annual mileage jumped 3.6% over the past year (to 8,894 miles)—the average dollar outlay per car now approaches $3,000/year. The average age of cars is now near 7.6 years—two years more than in the late 1960s just before the oil embargo.

Some interesting numbers are also presented on how car costs vary—depending on the size and number of years held. A new compact which is driven 10,000 miles a year and is held for five years costs about 48¢/mile—15% more than a subcompact but 10% less than an intermediate model.

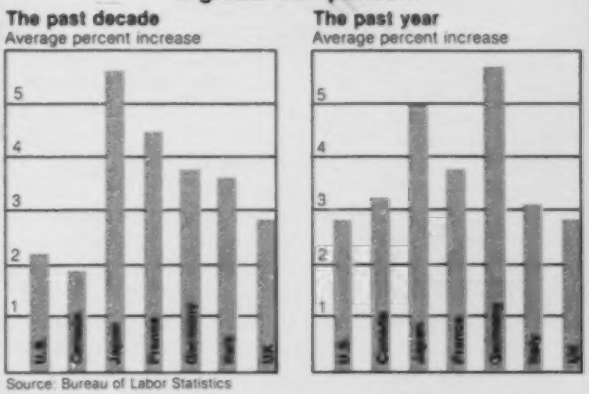
Those same vehicles driven for only two years show that average-per-mile costs rise about 13-15%. On the other hand, if you hold onto the vehicle for 10 years, costs drop 20-23% from the 5-year benchmark figure.

Motor vehicle costs level off



Source: Hertz

Factory productivity gains: A global comparison



Source: Bureau of Labor Statistics

Whither U.S. productivity?

The nation is still not faring all that well in the international productivity battle.

Although U.S. factory efficiency gains over the past year have been in the fairly respectable 2.8% range, they have still lagged behind those of most Western World competitors. West Germany and Japan, for example, racked up 5.7% and 5.8% increases—with the trade-weighted average of nine foreign countries estimated to be up by 4.1%.

The picture is equally bleak when viewed from a longer-term perspective (the last decade). Again, the U.S. is at the low end of the totem pole—with its 2.2% average annual advance over the past 10 years coming out far below that of Japan (5.6%), France (4.5%), West Germany (3.8%), and even the United Kingdom (2.8%).

This could explain why the recent weakening of the U.S. dollar has not helped that much in reversing our trade deficit.

Productivity, along with pay hikes, helps determine unit labor costs—the major element in overall production costs.

And the current year doesn't promise any dramatic change in productivity. U.S. efficiency so far this year has moved up at only a 1.3% annual rate—with little more than a 2% gain projected for this year as a whole.

Similar projections for the rest of the industrialized world are not yet available. But right now, they should at least be above the current 2% domestic rate. This indicates that U.S industry is in for more rough competition in the quarters ahead.

The basic problem, say most business economists, is that the U.S. is still not earmarking enough money for new automated equipment—the kind that can make a significant difference in output per man-hour. Most forecasts for equipment spending project a drop for the rest of this year—and another small decline possible for 1987.

This month's breakdown

	Latest level (August)	% change from: Month ago	Year ago
Bearings	357.0	0.0	0.8
Bolts, nuts, etc.	278.0	0.3	0.1
Chemicals, inorganic	294.9	−0.2	−2.3
Chemicals, organic	320.6	−1.2	−11.6
Concrete products	325.0	−0.3	0.7
Corrugated cartons	266.9	1.2	0.1
Cutting tools, small	292.9	0.2	2.0
Electric lamps (bulbs)	348.2	0.2	1.0
Electronic components	202.5	0.0	2.4
Fans and blowers	365.6	0.0	1.6
Foundry and forge products	361.9	−0.4	−0.7
Fuel oil (residual)	360.8	−17.0	−59.5
Furniture, commercial	318.2	−0.3	2.3
Gasoline	310.7	− 2.0	−46.0
Glass, flat	234.1	0.1	2.9
Glass containers	400.0	0.1	3.3
Gypsum products	343.9	−1.1	1.7
Hand tools	384.1	0.1	2.4
Hand tools, power driven	237.7	−0.2	2.0
Industrial furnaces	395.1	−0.1	2.6
Integrating and measuring instruments	236.4	−0.2	1.8
Internal combustion engines	354.0	−0.1	2.0
Lubricating oil	365.6	−1.0	−1.0
Lumber millwork	321.8	0.1	2.5
Material handling equipment	296.9	0.0	0.5
Metal containers	362.5	0.1	1.3
Metal mill shapes (nonferrous)	300.7	0.3	−2.5
Metal tanks	298.7	0.1	−2.4
Motors and generators	353.3	−0.1	0.5
Motor trucks	306.3	−1.6	4.4
Office and store equipment	154.5	0.2	0.4
Paperboard	274.1	1.3	3.1
Paper boxes and shipping containers	270.7	1.2	0.8
Paper office supplies	237.5	−0.5	−0.1
Paint	282.4	0.0	1.9
Plastic resins	294.6	−1.6	−3.9
Precision measuring tools	268.2	0.0	1.9
Pumps and compressors	362.4	0.1	1.5
Refractories	373.1	0.0	0.5
Rubber belts and belting	335.1	−1.4	−0.8
Scales and balances	231.3	0.0	0.9
Steel products	348.1	0.0	−4.1
Switchgear	286.6	0.5	1.5
Textiles, synthetic fibers	149.6	−0.3	−3.3
Textiles, gray fabrics	151.8	0.0	0.9
Tires and tubes	233.5	0.0	−1.1
Transformers and power regulators	233.9	0.8	0.5
Welding equipment	302.1	0.0	3.2
Wire and cable	205.4	−0.1	−0.2

CURRENT PRICES

Declines narrow as prices flatten

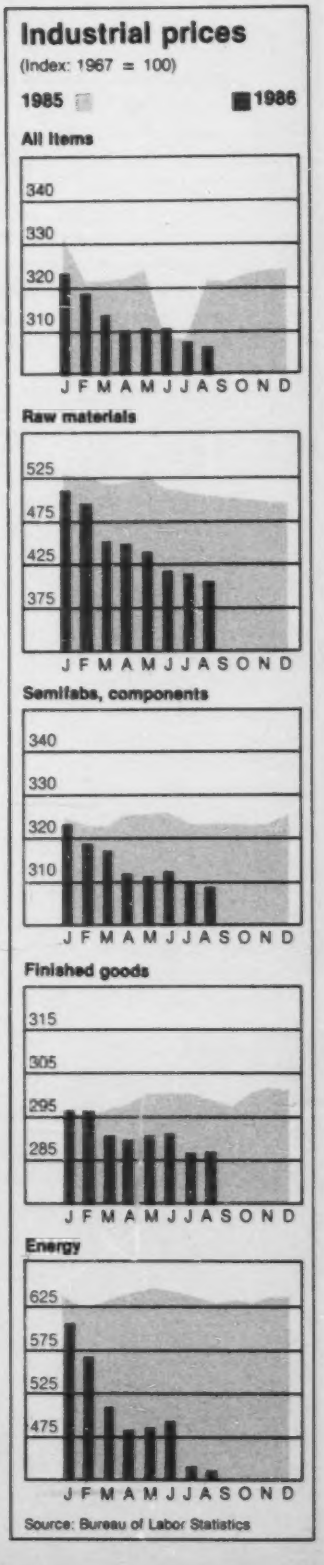
The lingering impact of the decline in energy tags from spring and early summer is continuing to exert a downward pressure on industrial price averages. Last month, for example, this energy weakness helped shave another 0.3% off Uncle Sam's overall industrial producer price index—bringing this bellwether yardstick close to 5% under year-earlier levels.

But that should be it for declines. Current increases in gasoline, heating oil, diesel fuel, and other oil-related products are beginning to influence this aggregate measure of inflation.

There are, however, few signs of any significant increase in most other sectors. Capital goods, for instance, have been increasing at only a 1% annual rate. And even this is tempered by declines in light motor trucks and oil field equipment.

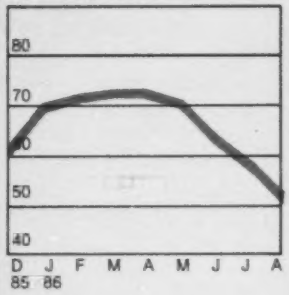
Textiles are actually weakening, principally because of the 50% reduction in raw cotton prices (reflecting lower government support levels). This, in turn, is putting downward pressure on both synthetic fibers and some fabric lines.

The chemical sector also remains virtually depressed. True, the latest reported declines in both industrial chemicals and plastic resins are unlikely to be repeated, but buyers report considerable resis-

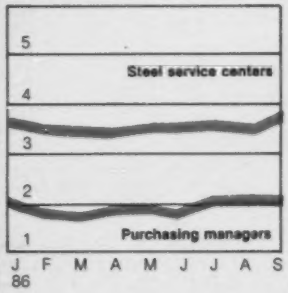


Steel

Operating rates

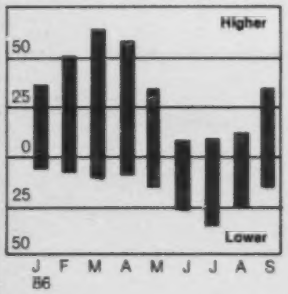


Inventories
(Months supply on hand)

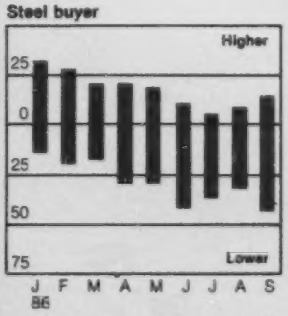


Demand
(Percent of respondents)

Service centers incoming orders



Steel buyer



tance to new price-boosting moves.

The picture is much the same for nonferrous metals. While lead and zinc have been fairly buoyant lately, this is more than offset by easiness in both aluminum and copper. And some of the speculative steam has gone out of the precious metals sector, with platinum off substantially from early September highs.

Steel also looks far from strong. The recent small hikes will probably wash out as soon as current labor problems are resolved.

Construction materials are also holding steady. The leveling off in housing—albeit at high levels—suggests little upward pressure on lumber and most other materials. In fact, cement has actually been edging lower.

About the only notable upswing has been in paperboard—as producers try to push linerboard up close to $320/ton. This, in turn, is nudging corrugated carton tags up. But there is plenty of buyer resistance so increases here, too, should be moderate.

Import prices
(Compared to domestic)

Steel buyers

ABOVE 14%
SAME 43%
SLIGHTLY BELOW 43%
SUBSTANTIALLY BELOW 0%

Service centers (carbon)

ABOVE 0%
SAME 72%
5-10% BELOW 28%
10-20% BELOW 0%
OVER 20% BELOW 0%

Source: Steel Service Center Institute, NAPM Steel Buyers Committee

STEEL SCENE

Fall gains won't offset fall for the year

A seasonal pickup in steel this fall won't be good enough to prevent overall declines for 1986, both in shipments and consumption.

There is some bullishness in the industry, but it isn't widespread. Steel distributors are the most optimistic. In a recent survey by the Steel Service Center Institute (SSCI), 35% of the respondents said they anticipate increased business over the next three months—well over the 15% who see declines.

But PMs are more bearish. Only 14% of steel buyers surveyed by N.A.P.M. expect to beef up their purchases. While that's an improvement over the 8% positive responses of the previous couple of months, it's still way under the 20% and 30% readings noted in the first few months of the year.

There isn't really much of a case for a big fourth quarter for steel. And without such a pickup, overall 1986 shipments are likely to be disappointing. Right now, mills are talking about a 70 million-ton-year—off three million tons from 1985.

The consumption picture is much the same. The Commerce Department puts 1986 domestic chewup at just above 89 million tons—three million tons under the total projected three months ago.

But consumption isn't the only factor behind the poor showing. Tight inventory policies are also playing a role. This is even true of service centers. SSCI president Andrew Sharkey notes that "members continue to report intensified efforts to hold or reduce current inventories during the coming months." Sixty-five percent of those polled indicate that stock levels are too high compared to shipments.

Buyers are saying about the same thing. Some 44% consider inventories too high relative to demand in contrast to only 4% who feel they're too low.

And 53% of these buyers say they will try to reduce inventories over the next six months. Only 4% say they contemplate some accumulation of steel.

What makes this so surprising is that the retrenchment is taking place at a time when there normally might be concern about supplies because of recent scattered strikes that have hit some mills.

But these strikes have apparently not sparked any worry about availabilities. Four out of five buyers surveyed see no problems anywhere. And the remaining few limit their concern to coated sheet, electrical sheet, and structurals.

Why the lack of concern? The surveys suggest two reasons: 1) expectations that business isn't going to set any records over the next few months and 2) the continuing availability of imports.

The import reliance is also being fed by continu-

ing bargains, despite quotas and a weakening U.S. dollar. Some 43% of queried steel buyers say imports are selling under comparable domestic product—8 points more than those who noted a price advantage a month ago.

Steel service centers also report a jump in overseas bargains, but only in stainless steel. Latest reports here indicate that more than one out of five (21%) now get significant 11-20% differentials on stainless.

Service centers are also optimistic about overall prices—domestic as well as imports—over the next six months. Latest findings: 70% see no changes and the remaining 30% are equally divided between those expecting increases and those expecting declines. This suggests that steel price averages will remain pretty much unchanged into early 1987.

PROCUREMENT STATUS

No queue in view

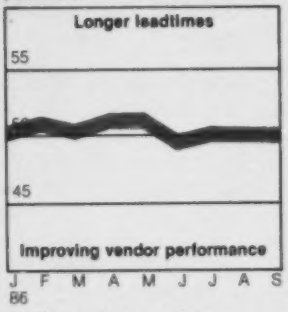
The normal early-fall delivery stretchout—reflecting seasonal demand recovery—has failed to materialize so far this year.

The situation is essentially status quo. *PW*'s exclusive leadtime index continues to rest squarely in the neutral 50 zone. And N.A.P.M.'s speed of delivery yardstick shows very little change, with the small number (6%) of items showing slowdowns offset by the same number

Monthly procurement status report

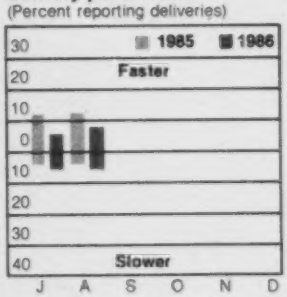
Leadtime index

A "diffusion" index based on 158 key commodities. Above "50" indicates a tendency for leadtimes to stretch out. Below "50" suggests improving vendor performance.



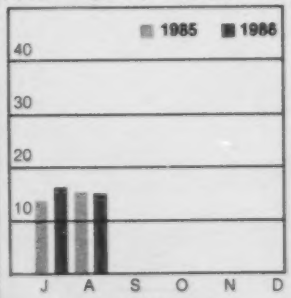
Delivery performance

(Percent reporting deliveries)



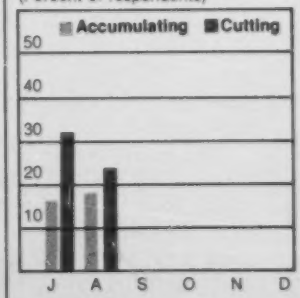
Forward commitments

(% committing 90 days or more in advance)



Inventory strategy

(Percent of respondents)



Source: NAPM

showing speedups.

Several factors are cited by PMs for this continuing easiness. Top among them is the current lackluster industrial production pattern—though this could improve a bit in this quarter as the number of respondents reporting improved orders (28%) topped those noting a worsening by almost a 2:1 margin.

Other reasons for the continuing "no sweat" situation include low factory utilization rates (only near 78% for the typical facility), the still-strong import flow (totals are actually rising), and better monitoring of incoming shipments—reflecting more computerization and improved expediting on the part of purchasing.

And as might be expected, there is little pressure for forward ordering or inventory accumulation. Some three out of five buyers are ordering production materials 30 days or less in advance. And inventory parers outnumber accumulators 24% to 18%.

Current price trends are also indicative of the relatively easy purchasing climate—as once again those reporting price declines (10%) outnumber those reporting increases (9%).

Where do we go from here? Buyer consensus is that ready availability will carry through the next few months. As one PM puts it: "There could be some inching ahead in leads toward the end of the year if forecasts for a modest business pickup materialize."

But he and others are quick to add that any increase in leadtimes will be very manageable and would be a small price to pay for another few months of continuing economic upturn.

Leadtimes and availability

Chicago: Some steel items are taking 1-2 weeks longer—with these new weekly leads: H-R sheets (6-7), wide coated sheets (7-8), heavy plates (3-4), and light plates (3-4). Softwood plywood is also out a week (to 3). But surfactants are in (to 2). No change in aluminum sheet or stock brass (1).

Cleveland: A modest shrinkage is noted in coil coating paint (to 2 weeks) and polyvinyl chloride resin (1-2). Other prevailing weekly leads: glassines and greaseproof papers (4-5), hardwood lumber (1-2), skids (1-3), plastic packaging materials (4-5), corrugated folding boxes (2-3), and cold finish aluminum (8).

Los Angeles: Brass castings have moved out 2 weeks (to 8-10). But grey iron castings are holding (at 6-8). Other current leads: galvanized sheet (12-14), aluminum tubing (4-6), stainless coil (12-14), aluminum sheets (12-14), standard fasteners (2), standard bearings (20-24), and standard valves (10-12).

Houston: High-density polyethylene has edged out a bit to 4.5 weeks—with price hikes looming. Other typical waits: polypropylene

(4.5), corrugated containers (3.5), galvanized steel coils (16), steel fasteners (2), plastic bottles (6), 4-color process printing (6), and steel pipe (4-12).

Philadelphia: Special polishing wheels have come in 2 weeks (to 12). But there has been little change in other MRO items such as standard drills (2-4), standard taps (3-4), standard grinding wheels (4-6), standard polishing wheels (3-4), cutting oils and lubes (4-6),and paper toweling (1). Steel leads are also holding.

Pittsburgh: Another month of little change. Average waiting times: multi-wall bags (6), plastic bags (3-4), corrugated and folding boxes (3-4), waterproof paper (8), lumber (3-4), seals (1-2), polyethylene and polyvinyl chloride (5-6), lead (2), zinc (3), metal hardeners (2), and coil coating paint (4).

Leadtimes (in weeks)

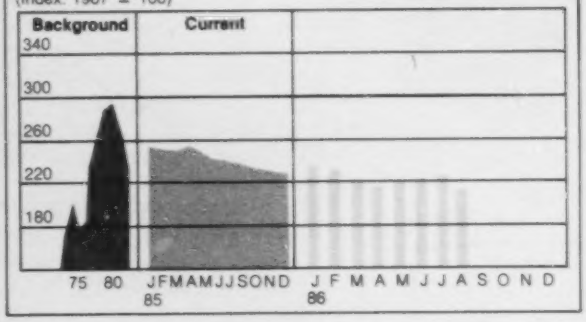
	Now	Month ago	Six months ago
STEEL			
Sheet (Phil)	4	4	4
C-R Sheet (Chgo)	7½	7½	7½
Plate (Phil)	3½	3½	3½
Plate (Chgo)	3½	2½	2½
Reinforced (Hous)	6	6	6
H-R Bars (Phil)	5½	5½	5½
H-R Bars (Chgo)	4	4	4
Cold-Drawn Bars (Phil)	5½	5½	5½
Galvanized (LA)	13	13	13
Galvanized (Chgo)	6½	6½	6
Structurals (Chgo)	4½	4½	4½
Structurals (Hous)	17	17	17
Tubing (Phil)	5½	5½	5½
Grey Iron Castings (LA)	7	7	9
Steel Castings (Hous)	11½	11½	11½
Forgings (Hous)	6	6	6
Pipe, Carbon (Hous)	17	17	13
ELECTRIC & ELECTRONIC			
Cables (Chgo)	8½	8½	8½
Capacitors (Chgo)	14½	14½	13
Circuit Breakers (Chgo)	6	6	6
Electromech. Devices (LA)	7	7	7
ICs (Linear) (Phil)	9	9	11
Motors (Phil)	9	9	10
Motors, 1000 hp & Up (Hous)	39	39	39
Printed Circuit Boards (Chgo)	9	9	9
Relays (Chgo)	15	15	15
Resistors (Chgo)	9	9	9
Resistors, Wirebound (Phil)	5	5	5
Transformers (Chgo)	10	10	10
LUMBER			
Hardwood (Pgh)	3	3	3
Hardwood (Clev)	1½	1½	1½
Plywood (Chgo)	3	1½	1½
Plywood (Phil)	1½	1½	1½
Softwood (Clev)	2	2	2
Softwood (Phil)	¼	¼	¼
Softwood (Pgh)	3	3	3
Particleboard (Phil)	2½	2½	2½
CHEMICALS-PLASTICS			
Adhesives (LA)	½	½	½
Naphthalene (Chgo)	2	2	2
Paint (LA)	4	4	4
Paint, Coil Coating (Pgh)	4	4	4
Paint, Maint. (Cleve)	2	2	2
Polyester Resin (LA)	2	2	2
Polyethylene Resin (Cleve)	2	2	2½
Polyethylene Resin (Pgh)	4	4	4
PVC Resin (Chgo)	2	2	2
PVC Resin (Pgh)	6	6	6
Titanium Dioxide (LA)	1	1	1
PACKAGING			
Bags, Kraft (Pgh)	5	5	5
Bags, Multiwall (Clev)	9	9	9
Bags, Multiwall (Pgh)	6	6	6
Cartons, Corrugated (Cleve)	2½	2½	2½
Cartons, Corrugated (Hous)	2	2	2
Cartons, Folding (Phil)	6½	6½	6½
Cartons, Folding (Pgh)	3½	3½	3½
Cellophane Wrap (Phil)	5	5	5
Plastic Bags (Pgh)	3½	3½	3½
Plastic Pkg. (Pgh)	3	3	3
Shrink Film (Chgo)	6	6	6
Shrink Film (Clev)	1	1	1
Drums, Fiber (Pgh)	1	1	1
Drums, Steel, Std. (Pgh)	1	1	1
Wood Pallets (Chgo)	2½	2½	2½
Wirebound Boxes (Pgh)	4½	4½	4½
Strapping (Clev)	1	1	1
Strapping (Pgh)	3	3	3
PAPER			
Fiberboard (Clev)	3½	3½	3½
Glassine (Clev)	4½	4½	4½
Glassine (Pgh)	5½	5½	5½
Groundwood (Clev)	4½	4½	4½
Groundwood (Pgh)	7	7	7
Kraft (Clev)	1	1	1
Kraft, Bleached (Clev)	1	1	1
Kraft, Bleached (Pgh)	5	5	5
Kraft, Natural MFNS (Clev)	1	1	1
Laminated (Clev)	8	9	8
Tissue (Pgh)	5½	5½	5½
NON-FERROUS			
Aluminum Coil (Chgo)	11	11	13
Aluminum Plate (Chgo)	12	12	12
Aluminum Sheet (LA)	4½	4½	4½
Aluminum Sheet (Chgo)	11	11	12
Brass Castings (LA)	9	7	5
Brass Rods (Chgo)	9	9	6½
Brass Sheet (Chgo)	5	5	4
Brass Tube (Chgo)	4	4	7
Copper Fittings (LA)	3½	3½	3½
Copper Mill Prod. (Pgh)	6	6	6
Copper Tube (LA)	7	7	7
Copper Tube (Phil)	5½	5½	5½
Lead (Pgh)	2	2	2
Magnesium (Pgh)	2	2	2
Manganese (Clev)	1	1	1
Nickel (Clev)	1	1	1
Nickel (Pgh)	2	2	2
Silicon (Clev)	1	1	1
Tin (Pgh)	2	2	2
Wire, Specialty (LA)	5	5	5
Zinc (Pgh)	3	3	2
MISCELLANEOUS			
Bearings, Domestic (Phil)	2	2	2
Bearings, Foreign (Phil)	26	26	26
Boilers & Furnaces (Hous)	35	35	35
Compressors, Centrifugal (Hous)	48	48	48
Compressors, Reciproc. (Hous)	39	39	39
Fasteners (Chgo)	1½	1½	1½
Fasteners (LA)	7	7	5
Fasteners, Std. (Phil)	2½	2½	1½
Heat Exchangers, Carbon-alloy Steel (Hous)	21	21	21
Heat Exchangers, Hi-pressure (Hous)	26	26	26
Insulation Mat'l. (LA)	7	7	7
Machined Parts (Hous)	9	9	9
Pipes & Valves (Chgo)	1½	1½	1½
Pumps (Hous)	24	24	24
Pumps (LA)	11	11	11
Rubber, Synthetic (LA)	2	2	2
Rubber Hose (LA)	4	4	4
Tungsten Carbide Parts (Hous)	15	15	15
Valves, Cast Steel (Hous)	17	17	17
Welding Supplies (Hous)	5	5	5

BUSINESS DATATRAK

Raw material price barometer

(Index: 1967 = 100)

Latest month	211.8
Month before	227.6
Year ago	239.8



Latest spot market prices

	Latest price	Previous month	Year ago
FERROUS METALS			
Pig iron, basic, valley, gross ton	213.00	213.00	213.00
Pig iron, Bessemer, Pitts., gross ton	213.00	213.00	213.00
Steel, billets, Pitts., net ton	367.00	367.00	367.00
Steel, structural shapes, Pitts., cwt.	23.90	23.90	23.90
Steel, structural shapes, Chi., cwt.	23.90	23.90	23.90
Steel, structural shapes, Los Angeles, cwt	23.90	23.90	23.90
Steel, bars, dlvd. Phila., cwt., merchant quality	23.95	23.95	23.95
Steel, bars, Pitts., cwt.	23.95	23.95	23.95
Steel, bars, C.R., Pitts., cwt.	31.00	31.00	29.25
Steel, plates, Pitts., cwt.	18.25	18.25	23.25
Steel, plates, H.R., Pitts., cwt.	18.25	18.25	23.25
Steel, sheets, C.R., Detroit, cwt.	25.90	25.90	27.10
Steel, strip, C.R., Chi., cwt.	36.18	36.18	36.18
Steel, basic wire, Pitts., cwt.	23.65	23.65	23.65
NONFERROUS METALS			
Aluminum, ingot, lb. (market place)	.550	.543	.475
Antimony, N.Y., dealer, lb.	1.07	1.06	1.33
Beryllium-copper, cost ingot, lb.	5.65	5.65	5.35
Brass, red, 85%, [sheet], lb.	1.28	1.27	1.29
Brass, yellow, [sheet], lb.	1.23	1.22	1.24
Cadmium, N.Y., dealer, lb.	1.00	1.04	0.80
Copper, electrolytic, wire bars, refd., lb.	.64	.63	.66
Copper sheet, over 24 in., lb.	1.37	1.36	1.38
Lead, common, N.Y., lb.	.23	.22	.19
Magnesium, pig ingot, [99.8%], lb.	1.53	1.53	1.48
Mercury, 20 fl. lots, N.Y., fl.	182.00	190.00	318.00
Molybdenum, oxide, dealer, lb.	3.00	3.00	3.15
Nickel, cathode, dealer, lb.	1.82	1.86	2.30
Platinum, dealer, oz.	581.00	541.00	318.00
Silver, N.Y., oz.	5.70	5.39	6.30
Tin, N.Y., dealer, lb.	2.57	2.55	5.80
Zinc, Prime West, East St. Louis, lb.	.440	.440	.410
Zinc, die casting alloy, No. 3, lb.	.475	.475	.485
PAPER			
Uncoated book #3 offset, ton	850.00	850.00	850.00
Watermarked bond, ton	985.00	985.00	985.00
Gummed sealing tape, carton	16.34	16.46	16.22
Shipping sacks, ton	390.00	390.00	390.00
Solid bleached paperboard, ton	580.00	580.00	550.00
Kraft linerboard, 42 lb., unbleached, ton	320.00	310.00	290.00
TEXTILES			
Burlap, 10 oz., 40", N.Y., yd.	.222	.229	.258
Cotton drill, 1.85, 59", 68x49, N.Y., yd.	.94	.94	1.04
Cotton middling, 1", N.Y., lb.	.330	.265	.566
Printcloth, 48", 80x80, N.Y., spot, yd.	.74	.70	.62
Army duck, 37", 13 oz., yd.	1.45	1.45	1.70
Blended printcloth, 64", 78x54, yd.	.750	.740	.680
20s combed yarns	1.74	1.70	1.95
Wool 64s, Staple, lb.	1.90	1.90	2.03
CHEMICALS			
Acrylonitrile, tanks, lb.	.395	.395	.455
Ammonia, anhydrous, tankcars, Gulf Coast, ton	80.00	80.00	N.A.
Benzene, petroleum, tanks, Houston, gal.	.80	.68	.93
Caustic soda, 76% solid, drums, carlots, cwt.	26.00	26.00	26.00
Cresylic acid [over 25%], tanks, lb.	.58	.58	.58
Formaldehyde, USP, 37%, [12% to 15% meth.], tanks, lb.	.106	.106	.106
Glycerine, synthetic, tanks, lb.	.91	.91	.91
Methanol, snv., tanks, 4,000 gals., f.o.b. Gulf Coast plants	.52	.52	.52
Naphthalene, crude, tanks, lb.	.22	.22	.22
Phthalic anhydride, tanks, lb.	.27	.27	.27
Polyethylene resin, low density liner film grade (market place), lb.	.255	.255	.280
Polypropylene, homopolymer grade (market price), lb.	.320	.330	.350
Polystyrene, general purpose grade (market price), lb.	.330	.330	.360
Polyvinyl chloride, pipe grade (market price), lb.	.285	.300	.250
Soda ash, 58%, light carlots, cwt.	6.15	6.15	6.15
Styrene monomer, 99.6%, tanks, lb.	.21	.21	.30
Sulphur, crude, ex-terminal, Tampa, Fla., lt.	157.50	157.50	157.50
Sulphuric acid, 66%, commercial, tanks, ton	66.86	66.86	66.86
Titanium dioxide, anatase, reg., carlots lb.	.73	.73	.69
Xylene tanks, gal.	.80	.80	1.36
BUILDING MATERIALS			
Lumber, 2x4 fir, mbf, cl	324.85	317.70	322.35
Lumber 2x2 pine, mbf, cl	313.00	311.75	289.85
Plywood, plyform, ¾", msf, cl	591.25	592.05	583.10
Plywood, ¾", msf, cl	385.55	385.20	382.45
Cement, bulk, ton, tl	63.35	64.43	64.91
Sand, ton, cl	6.62	6.62	6.35
Ready-mix concrete, 3,000 psi/cu. yd., 15 cu. yd.	45.83	48.01	47.99
Crushed stone, 1½", ton, cl	7.78	7.80	7.80
Concrete blocks, sand/gravel, 8"x8"x16", ea., tl	0.83	0.82	0.81
Gypsum sheathing, ½"x1"x8", msf, tl	217.57	217.57	207.94
Brick, common, per thousand, tl	185.81	185.81	183.70
Asphalt paving, AC-20	144.97	145.53	176.97
Concrete sewer pipe, 12", prem. joint, per foot, cl	7.21	7.23	7.13
FUELS			
Fuel oil, No. 6 or Bunker C, Gulf., bbl.	11.00	8.00	22.25
Fuel oil, No. 6 or Bunker C, N.Y., barge, bbl., reseller	14.75	13.50	19.00
Gasoline, 91 oct., reg., Los Angeles, rack, gal.	.470	.405	.785
Gasoline, 94 oct., reg., Chi., tank car, gal.	.470	.460	.774
Heating oil, No. 2, Chi., bulk, gal.	.450	.445	.768
Heating oil, No. 2, N.Y., bulk, gal.	.463	.430	.770
Heavy fuel, FS 400, Los Angeles, rack, bbl	26.50	26.50	26.50
Jet kerosene, gal.	.410	.400	.803
LP-Gas, propane, Okla., tank cars, gal. [incl. discount]	.245	.245	.320
SCRAP MATERIALS			
Steel, No. 1, hvy., dlvd., Pitts., ton	76.00	76.00	75.00
Steel, No. 1 hvy., dlvd., Chi., ton	72.00	76.00	71.00
Copper, No. 1, East, wholesale buy, dlvd., lb.	.560	.540	.550
Copper, No. 2, East, wholesale buy, dlvd., lb.	.480	.460	.470
Brass, red, East, wholesale buy, dlvd., lb.	.520	.500	.510
Brass, yellow, East, wholesale buy, dlvd., lb.	.310	.310	.330
Alum., old sheet/cast, E., wholesale buy, dlvd., lb.	.335	.325	.295
Alum., mixed clip., E., wholesale buy, dlvd., lb.	.355	.345	.325
Zinc, old, East, wholesale buy, dlvd., lb.	.17	.17	.11
Lead, clean solids, East, wholesale buy, dlvd., lb.	.130	.120	.110
Paper, No. 1 mixed, dlr., N.Y., ton	Nom.	Nom.	Nom.
Paper, old corrug. box, dlr., Chi., ton	25.00	25.00	10.00
Paper, old corrug. box, dlr., N.Y., ton	20.00	18.00	8.00
Osnaburg cuttings, dlr., f.o.b. N.Y., lb.	.09	.09	.09
White wipers, No. 1, dlr. buy, f.o.b. N.Y., lb.	.11	.11	.19

[Sources: Metals Week, Engineering News-Record (20-city averages), Platt's Oilgram Price Service.]

Good news for buyers of fax, ETs, copiers, and PCs

If you can manage to make sense of the confusion in today's office equipment industry, it is definitely a buyer's market. Prices for most types of office equipment are soft or are actually declining on a combination of the falling dollar, more-than-ample dealer/distributor stocks, and technological advances.

The office equipment market is ripe for purchasing involvement and direction—from coordinating the purchase to vendor selection and contract negotiation.

The trick to buying office equipment in today's rough-and-tumble market is to do a thorough job of researching the match between your company's needs and the features on a given piece of equipment. Many manufacturers are attempting to cloud the price issue by adding all sorts of fancy "high-tech" features to a copier or an electronic typewriter—features that you may not need and certainly shouldn't pay for. One copier industry insider explains the problem succinctly, "Technological development is way out in front of market development. That means that manufacturers must convince customers that they want and need all of the goodies they can now offer." That statement should send a signal to savvy office equipment buyers: Price is only one aspect of a good equipment buy today.

A new nationwide *PurchasingWorld* survey finds that for every PM experiencing an overall price increase in this area during the current year, there was someone else who managed to eke out a reduction. And that trend is likely to continue. Growth projections from the Computer and Business Equipment Manufacturer's Association (CBEMA) for various types of office equipment (facsimile machines, copiers, and electronic typewriters) call for very small increases or even slight declines in dollar sales through 1995. At the same time, growth is expected in the number of units sold (see accompanying charts).

Price crunch

Why so much price pressure on office equipment these days? The answer is four-pronged: 1) substantial efficiency gains, 2) overcapacity, 3) too many suppliers, and 4) price-cutting by overseas suppliers. The latter is amply demonstrated in the PC sector where cheap IBM clones have flooded the market, forcing sharp declines in overall quotes (see the story on page 58 for more details).

Another factor that is keeping office equipment manufacturers off balance is less-than-sensational demand. While buying is up slightly, office gear prices just haven't reached the levels projected by some of the more optimistic producers earlier this year.

The big question, of course, is what happens in the next several years. Is it realistic to expect further price declines? Will demand show any pickup in the quarters ahead? Here's what respondents to *PW*'s survey have to say:

- **1987 overall price trends:** Some increase does seem likely—65% of the survey respondents see increases while only 14% count on continuing declines (21% see no change). But the increases are only expected to be in the 0-5% range.
- **1987 specific price changes:** Survey respondents say that prices will drop for PCs, PC software, printers and other peripherals, and electronic typewriters. The general feeling is that there will be slight increases in copiers, telecommunications equipment, office furniture, and office supplies.
- **1987 overall volume:** The picture here is basically bullish. While no big boom is anticipated, survey respondents feel that next year's de-

Office Copiers

"Prices will drop while units will increase"

Annual Rate of Growth
1985-1995
Units 12%
Dollars 3%
Source: CBEMA

mand picture will be better than this year's level. Forty percent of surveyed buyers expect to increase their purchases of office equipment and supplies next year. That compares to only 28% who will be buying less and 31% who will buy about the same.

Purchasing's in the thick of it

Despite the headaches this market presents, buyers are not walking away from the challenge. In a special *PW* survey question asking about the purchasing department's role in the office equipment buying decision, almost 20% of respondents say they are the primary decision makers. Almost all of the rest of the respondents (71%) say that they are an integral part of a team buying effort. Significantly, only 11% say they are simple order takers.

Buyers involved in office equipment are taking steps to get top mileage out of their efforts. Much of their emphasis is on price—with better quotes being sought through hard-nosed negotiations and increased use of volume purchases and blanket ordering.

Buyers also report that overseas bargains—though they certainly do exist—are becoming more difficult to find. The appreciation of the yen has hurt Japanese bargains but buyers are finding new sources of supply in such places as South Korea.

A savvy buying strategy addressing today's peculiar market climate in office equipment and supplies would have to include:

1) keeping up with fast-changing technology
2) sorting out a salesman's pitch from actual fact—especially on "high-tech" features

Facsimile Equipment

"Prices and sales should stay on an even keel"

Annual Rate of Growth
1985-1995
Units 10%
Dollars 11%
Source: CBEMA

3) careful evaluation of your exact needs so that you don't end up paying for fancy features you don't need
4) keeping an eye on standardizing equipment in your office—even in this volatile market
5) deciding on whether to buy or lease
6) considering equipment that can be updated as an alternative for replacement
7) evaluating the chances of fast obsolescence
8) negotiating solid, comprehensive service contracts
9) checking vendor references
10) consulting with experts when necessary.

On the following pages, *PurchasingWorld* has compiled the most up-to-date information about the major copier, electronic typewriter, and facsimile vendors. Resource tables and news on the latest product developments in these categories will help you make solid purchasing decisions for your future office equipment buying. Use the reader service card for company and product information. ***PW***

Where to go for guidance: office resources

To make an informed office equipment purchase, buyers must have accurate and thorough information—a tall order in an industry as volatile as the office equipment market. Here are some resources that may help you:

- *The Office Purchasing Guide: How to save up to 50% on office supplies & furniture, business forms & printing, and office machines and equipment* by Tod J. Snodgrass. This book gives tips and detailed information on how to save money buying office equipment and supplies. Includes examples of various business forms. **Circle 34**
- *Official Facsimile Users' Directory*. This 465-page guide lists the facsimile number and other company information for thousands of facsimile machines across the country. The book also provides basic information on national and international facsimile standards. **Circle 35**
- *1986 Report on the NOMDA Show* by Camarro Research. This comprehensive report gives details on price, performance, and marketing strategy for the electronic typewriter industry with a company-by-company, model-by-model breakdown. **Circle 41**
- *What to Buy For Business*. Subscribers to this consumer report designed specifically for business buyers, will receive in-depth monthly reports (including candid appraisals and product ratings) for typewriters, computers, postage meters, telephone systems, software, business travel, printers, and other office products and services. **Circle 46**
- *North American Copier and Copyboard Guide* by Infomarket Inc. This 480-page book gives company-by-company rundowns on copier products and copyboards. Technical specifications, features, and operator tasks are detailed for each model. **Circle 52**

Electronic Typewriters

"Demand creeps up, dollars fall as text, processing stations gain popularity"

Typewriters

Annual Rate of Growth
1985-1995
Units 3%
Dollars 12%

Text Processing Workstations

Annual Rate of Growth
1985-1995
Units 15%
Dollars 11%
Source: CBEMA

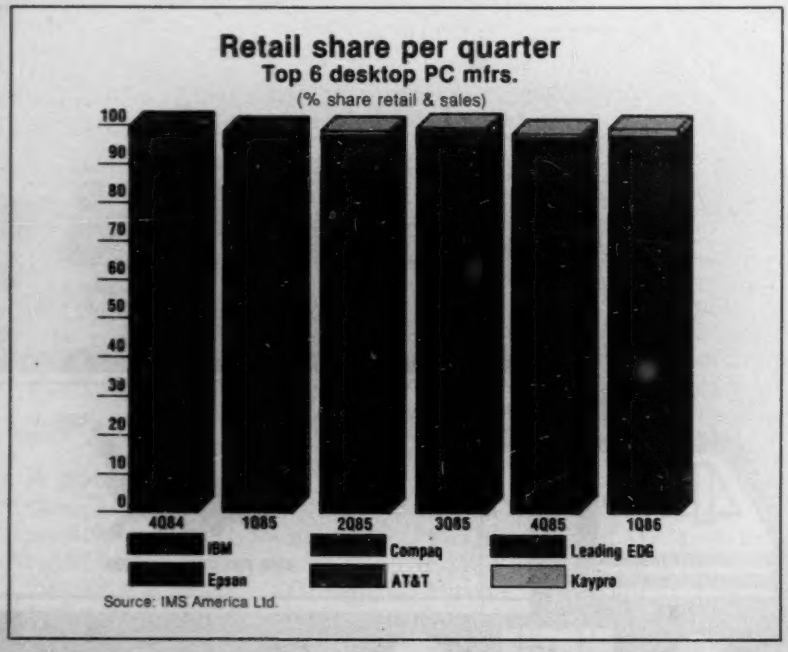
Send in the clones

The computer market scene is almost like a war movie. Big Blue is battling the Clones. Everybody in the business is fighting to have the most powerful machine, with the newest technology. And there's the bloodletting from cut-throat prices. It's a great show, with an all-star cast. Every buyer has to love it, confusing as it might be.

Take a look at the price front: PCs have been dropping at the rate of 20% a year since the introduction of the first models a few years back. This year, prices could drop as much as 25-30%, as both overseas and U.S. competitors step up the pressure on benchmark IBM models.

Here are some recent developments in the fast-changing PC war:

- Some of the large retail chains are selling Asian-built IBM clones under their own brand names. Even without this development, the leading compatibles are clawing away at IBM's dominance. The giant's share of market in PCs is now down to 75% from a high of 95% in the third quarter of last year. The top-sellers—Compaq, Epson, and Leading Edge—captured better than 20% of retail sales in the first quarter of 1986. Greater fragmentation of market share can be expected as the number of clones proliferate. Adding to the continuing competitive pressure is the ease of cloning. It's now virtually impossible to hide anything in silicon chips anymore. Once a chip is sold in a system, it can be opened up, photographed, analyzed, and recreated without violating copyrights. It is expected that 3.6 million clones will be sold worldwide in 1986 alone.
- IBM's new 286 XT is priced about 25% under comparable versions of its previously more powerful PC-AT. And, if industry rumors prove correct, the company will be coming out with a new low-priced consumer-oriented IBM machine.
- One important development is the increasing popularity and proliferation of laptop models. These portable, full-function machines can be had now for less than $2,000—a quarter of what they went for a few years ago.
- Machines with Intel's much heralded 80386 microprocessor are gradually being introduced into the marketplace. The chip runs four times faster than current PC microprocessors. And, because it has a lot more memory capacity, it will allow the use of some powerful programs that are now usable only on large minicomputers or mainframes.



Slower than expected

What is making the competitive infighting even rougher is the slowdown in the growth of demand for PCs. Unit gains of 133% and 134% were posted in 1983 and 1984, according to Dataquest, an industry research outfit. With gains like these when PCs were first catching on, some deceleration was to be expected.

But no one anticipated last year's 2% decline, or an only 8% advance for this year, when 12-15% was projected at the beginning of the year. Mix this with the price declines and it paints a woeful picture for computer makers.

What will most likely happen is that the industry will undergo another wrenching shakeout of the dozens of newcomers lured into the market over the past year or so by plunging costs and IBM's tardy product improvements.

Some cheer here

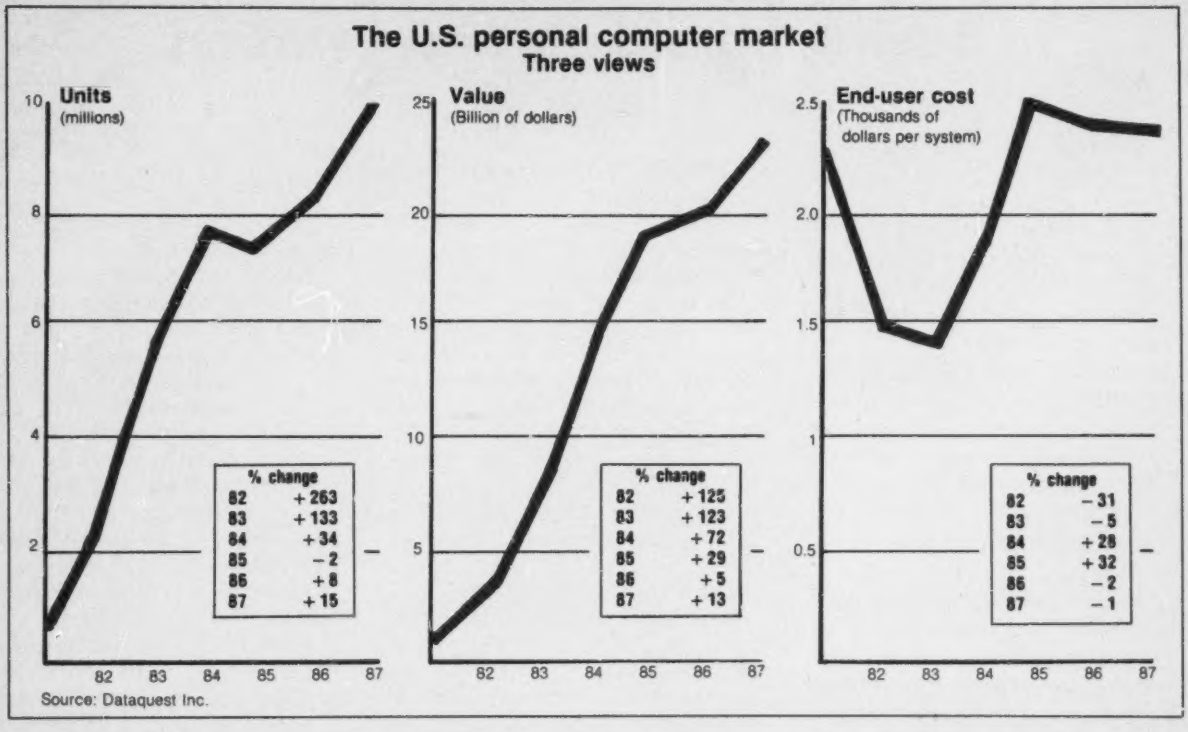
On a positive note, some manufacturers have been able to parry the price blows, at least partially, by enticing buyers to go for upgraded, more expensive models. This is evident in Dataquest's estimates of the average outlays per unit. These expenditures, despite the widely ballyhooed price cutting, have been relatively stable this year, falling off only 2% from 1985.

Another cheery sign for manufacturers is the acceptance by business of portable computers. The sharp reductions mentioned earlier have convinced many firms to take the laptop seriously. Some analysts, for example, see sales more than doubling in this area in the current year and doubling again in 1987.

Welcome the 386

Among the features sparking the increase in laptop sales are special features and greater availability of software.

Buyers are also keeping their eyes on upcoming "third generation" PCs—those using the new 80386 microprocessor. While only a few models using the new chip have hit the market, it is expected that a



flood of these more efficient machines will be out before too long. Intel, the developer of the new chip, estimates that more than 150 desktop computers are being designed around the new 386.

Speed is the big selling point. According to Intel's benchmark tests, the 386 can process about four million instructions per second (4 mips), handling 32 bits of data at once. By contrast, the older 80286 chip that powers the IBM PC-AT works with 16 bits of data and is rated at only 1.5-2 mips.

Aside from speed, the 386 has vastly increased memory potential and it makes multitasking (the ability to do several jobs at the same time) possible. Once software is available, users will be able to switch back and forth between major programs at the touch of a button because the 386, unlike other 32-bit chips, keeps different software applications from interfering with one another.

But these new generation machines will carry a premium. Tags will range upwards of $8,000. On the other hand, this relatively high price may well be worth it to users who want to be able to run elaborate simulations as well as sophisticated engineering and scientific programs that previously required high-priced mainframes.

Despite these advantages, sales for these more powerful units may face slow going at first—at least until the price comes down. Right now, it is too high for the mass market. Another temporary roadblock is that the 386-designed software, which will be necessary for full realization of the machines' potential, won't be ready for another year.

PC prices dip

The overall average dealer price of a personal computer fell by $170—from $1,574 to $1,404—between the last quarter of 1984 and the first quarter of 1986. Top ten producer prices fell by approximately the same amount—from $1,588 to $1,443. Excluding IBM, the top nine producers showed the greatest average price decline, with a drop of over $200—from $1,620 to $1,417. Here's a breakdown of the six-quarter average dealer price for the top ten and for all others:

IBM	$1,742
Compaq	2,343
Leading Edge	1,192
Epson	982
AT&T	1,505
Kaypro	1,179
NCR	2,304
Sanyo	485
Zenith	1,486
ITT	1,207
All others	822

Source: IMS America Ltd.

Long-term outlook

Most industry analysts say that the future is basically bullish, with about 15% annual gains likely through 1990. By that time, some 13 million PCs could be clearing the market—up 60% from the 8 million units expected to be sold this year.

The gains in PC sales are not to be limited to business applications. About 14% of U.S. homes now own a computer and that is expected to rise to near 25% by the end of the decade.

But the tough competition and rapidly emerging technological breakthroughs will continue to keep the industry off balance. On the competition front, for example, look for Japan and Korea to continue to seek further inroads into the lucrative American market.

In short, the buyers market is here to stay. ***PW***

DRI forecast

Ho hum price pressures

Don't worry about industrial price inflation heating up significantly over the next two years. But on the other hand, don't expect a repeat of the negligible advances of the past 12 months.

That's the gist of the latest Data Resource Inc. (DRI) quarterly rundown of key product price trends for 1987 and 1988. Credit the continuing restraint, say DRI analysts, to a combination of slow economic growth and relatively low overall inflationary pressures.

The lack of any underlying price push, aside from slow growth, is attributed to modest wage boosts (average earnings for private nonfarm production workers will rise from just 2.7% this year to only 3.3% in 1987 and 4.1% in 1988) and lingering softness in the energy sector (with oil actually expected to weaken again by next spring).

Here's a more detailed rundown of what analysts at the Lexington, MA-based econometric consulting firm see ahead for some key product lines:

- **Refined petroleum products:** Processed fuels and lubricants, reflecting the above oil price scenario, will drop another 3.6% over the next 12 months (on top of this year's estimated 18.8% plunge) before rising a modest 5.4% in the 12-month period ending fourth quarter 1988. Individual products like gasoline will follow this pattern rather closely.
- **Chemicals:** Energy weakness will have its impact here, too—though overcapacity will also play a role in keeping a lid on tags. Industrial chemical price averages, which fell 5.4% over the past 12 months, are expected to rise by only 1% through late 1987—and only a slight acceleration to 3.1% anticipated for 1988.
- **Metals:** Tags should move up modestly in 1987 and 1988—as continuing rationalization brings supplies more in line with demand, and cost pressures start to rise. Steel mill product averages, which fell 4.4% over the past year should advance 3.5% over the next 12 months and 4.7% over the ensuing four quarters. And primary nonprecious, nonferrous metals will follow this year's 2.1% average drop with increases of 4.8% in 1987 and 3.2% in 1988.
- **Machinery:** General factory overcapacity and uncertainty over the new tax law will put a damper on both demand and price increases. But negligible cost escalation will ease the pinch on profits. Overall, aggregate machinery and equipment prices will average a modest 2.9% annual rate of increase between 1986 and 1988.
- **Oil country goods:** Oil price weakness will have a depressing effect. Prices will remain essentially flat over the near term. More manufacturers will be shutting down operations—many of them permanently.
- **Electronic components:** Declining book-to-bill ratios suggest that industry recovery has stalled at least temporarily. But some recovery is expected next year. Escalation rates at that time, reflecting this stronger demand, will rise 2.8%. And a rather strong 4.9% is seen for 1988.
- **Construction materials:** Price escalation will remain moderate because of the projected declines in nonresidential construction as well as gradually weaker levels of home building. Sheet metal products, for example, will show only 1.5% and 2.1% advances in 1987 and 1988. But heating equipment could move up at a somewhat strong 3.8% annual rate over the next few years because of stronger cost pressures.
- **Corrugated containers:** The slow price recovery that recently got underway will continue. By late next year prices could be up another 2.9%—with an even larger 4.1% gain projected for the subsequent 12-month period.
- **Autos:** Fairly good demand and rising import tags will permit some modest advances. DRI forecasts average annual increases of 4.2% from now through the end of 1988.
- **Appliances:** Higher costs will place upward pressure on prices by late 1987 and 1988 as energy materials and labor costs begin to rise. All in all, look for a 3.3% annual rate of advance over the forecast period.

PW

Industrial Price Trends Through 1988
(Comparison of 4th quarter pricing)

Product	% change 86/85	87/86	88/87
Raw materials, energy			
Residual fuels	-37.1	1.2	8.8
Industrial chemicals	-5.4	1.0	3.1
Processed fuels & lubricants	-18.8	-3.6	5.4
Intermediate materials, ex. food	-2.0	1.5	3.7
Metals			
Steel mill products	-4.4	3.5	4.7
Galvanized sheet & strip	-5.2	5.2	4.8
Stainless plates	-1.0	4.1	4.0
Primary aluminum	3.5	4.6	2.5
Lead, pig	8.6	2.8	4.7
Zinc, die-cast alloy No. 3	2.2	3.4	0.5
Magnesium, pig	3.9	3.9	4.8
Aluminum shapes	-0.1	5.7	2.6
Components			
Plastic construction prod.	-2.2	0.1	0.8
Laminated plastic sheets	0.2	1.9	3.6
Corrugated containers	1.6	2.9	4.1
Foundry & forge shop prod.	1.7	4.0	3.7
Motors & generators	1.2	6.2	6.1
Electronic components	1.9	3.6	5.8
Refractories	0.8	2.7	2.8
Tires	1.5	1.5	4.8
Machinery			
Construction eqpt.	2.2	4.1	4.9
General purpose mchy.	1.7	3.1	4.1
Special industry mchy.	3.1	4.9	5.5
Electrical mchy. & eqpt.	1.9	4.4	5.0
Mining mchy. & eqpt.	-0.1	3.1	0.9
Trucks (over 10,000 lb.)	4.8	5.9	5.3

Source: Data Resources, Inc. Cost Forecasting Services

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